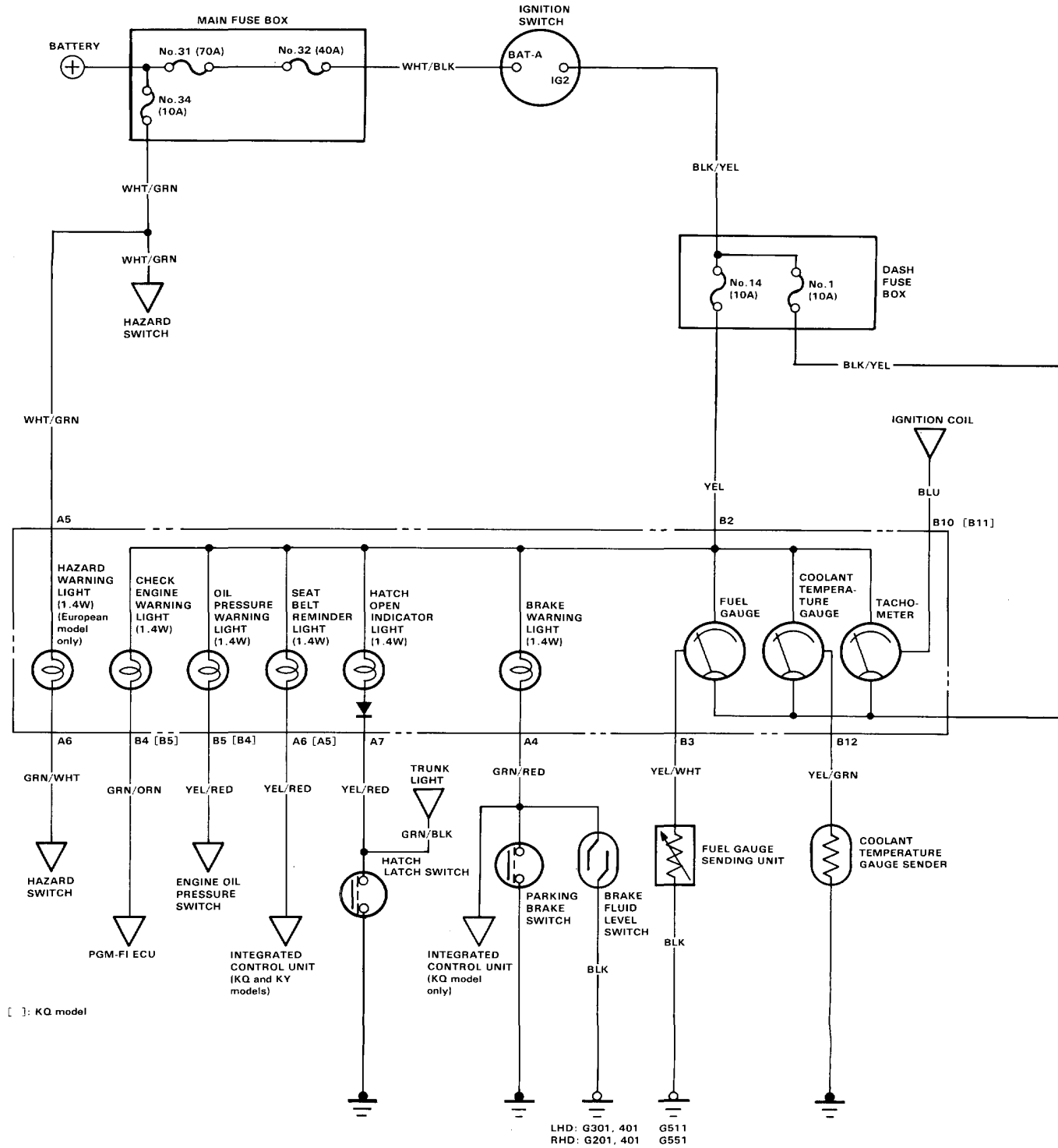
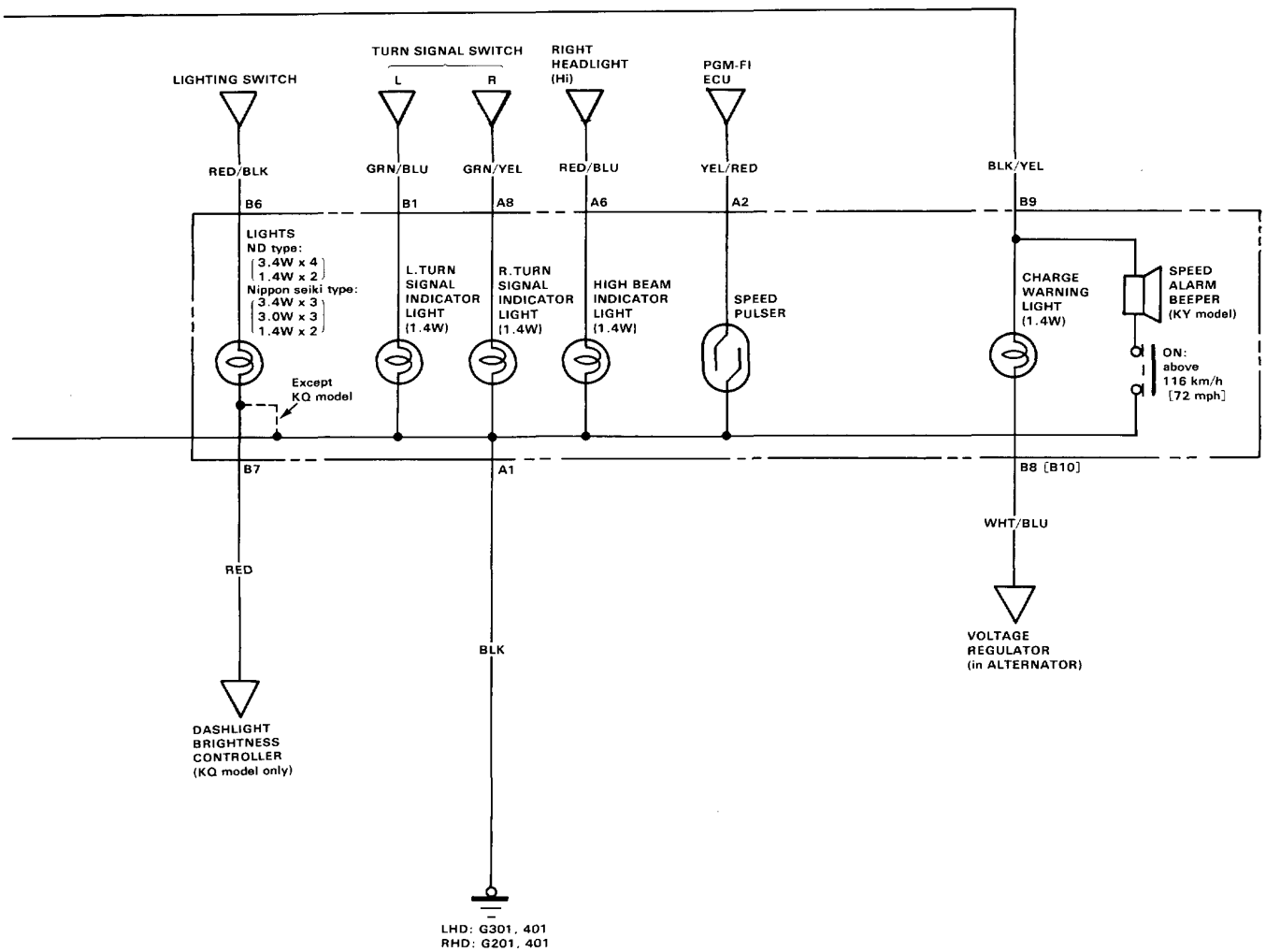
Gauge Assembly

Circuit Diagram



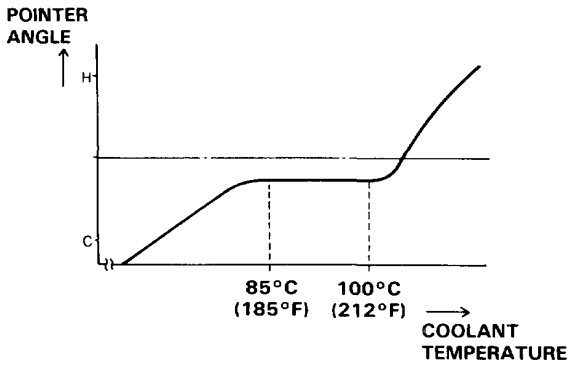

LIGHTING SWITCH
TURN SIGNAL SWITCH
L
R
RIGHT HEADLIGHT (Hi)
PGM-FI ECU
RED/BLK
GRN/BLU
GRN/YEL
RED/BLU
YEL/RED
BLK/YEL
B6
B1
A8
A6
A2
B9
LIGHTS
ND type:
3.4W x 4
1.4W x 2
Nippon seiki type:
3.4W x 3
3.0W x 3
1.4W x 2
L.TURN SIGNAL INDICATOR LIGHT (1.4W)
R.TURN SIGNAL INDICATOR LIGHT (1.4W)
HIGH BEAM INDICATOR LIGHT (1.4W)
SPEED PULSER
CHARGE WARNING LIGHT (1.4W)
SPEED ALARM BEEPER (KY model)
ON: above 116 km/h (72 mph)
Except KQ model
B7
A1
B8 (B10)
WHT/BLU
RED
BLK
VOLTAGE REGULATOR (in ALTERNATOR)
DASHLIGHT BRIGHTNESS CONTROLLER (KQ model only)
LHD: G301, 401
RHD: G201, 401

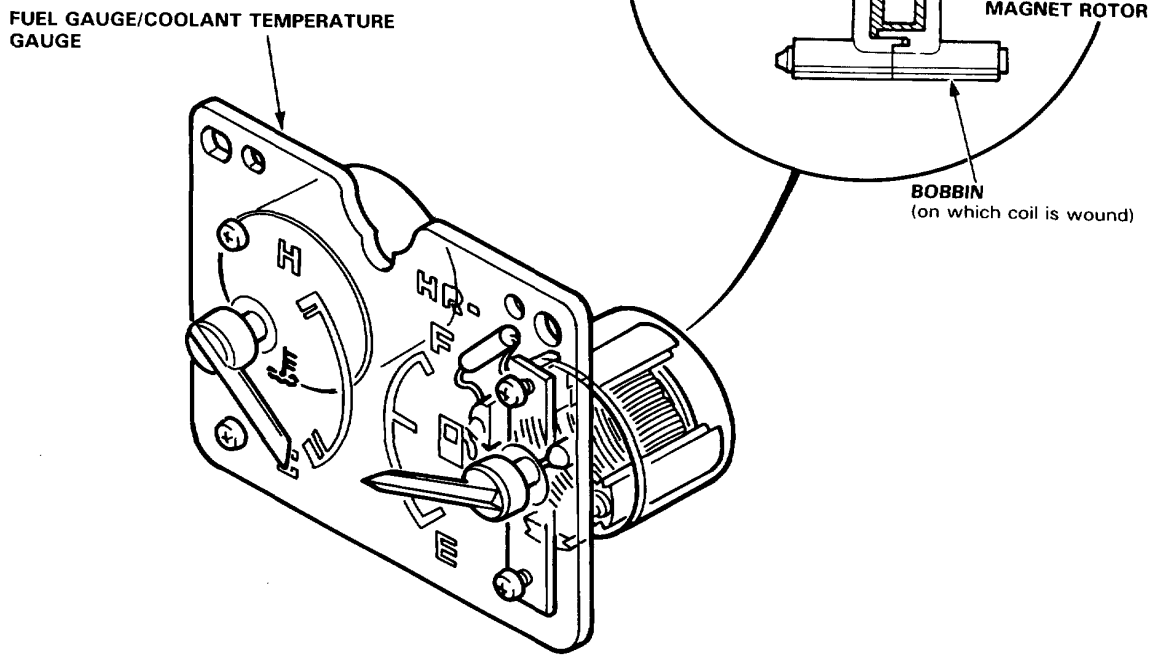
Gauge Assembly

Description

Bobbin Type (Cross Coil Type) Gauge:

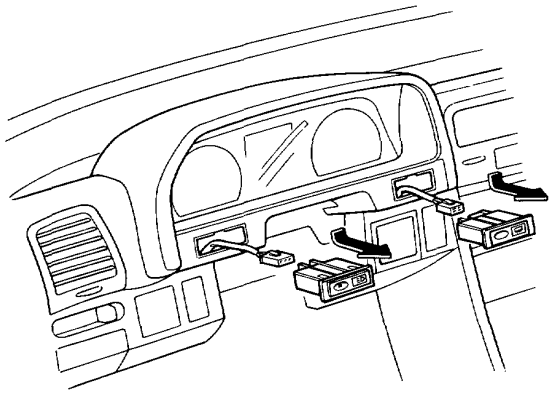
- A bobbin type gauge is an electromagnetic instrument in which two intersecting coils are wound around the permanent magnet rotor. By varying the resistance of the unit to vary the current which flows through the coil, the magnetic force which energizes the coil will vary, causing the rotor (pointer) to operate. A sliding resistance is employed in the fuel gauge just as in a bimetal type gauge, and a thermistor is used in the temperature gauge.
- The rotor of the fuel gauge is immersed in damper oil and its center of gravity lies roughly along the rotating shaft, hence the fuel level is indicated continuously even when the ignition switch is OFF.
- The coolant temperature gauge is a center point stable small indicating angle type which indicates the temperature of the coolant between about 85°C (185°F) and 100°C (212°F).



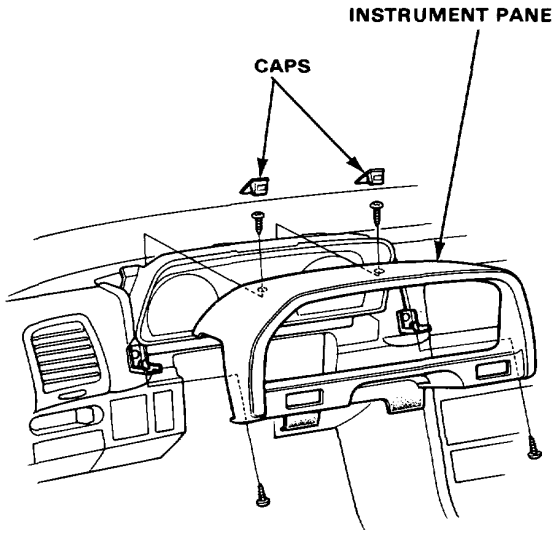


Removal

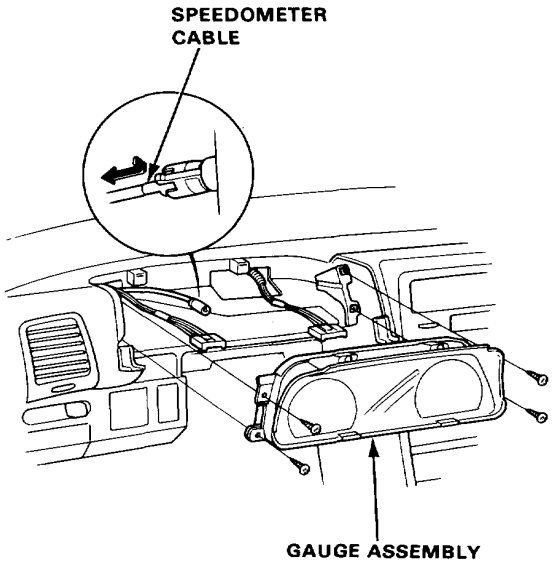
1. Remove the switches from the instrument panel.



2. Remove the caps and 4 screws, then remove the instrument panel from the dashboard.

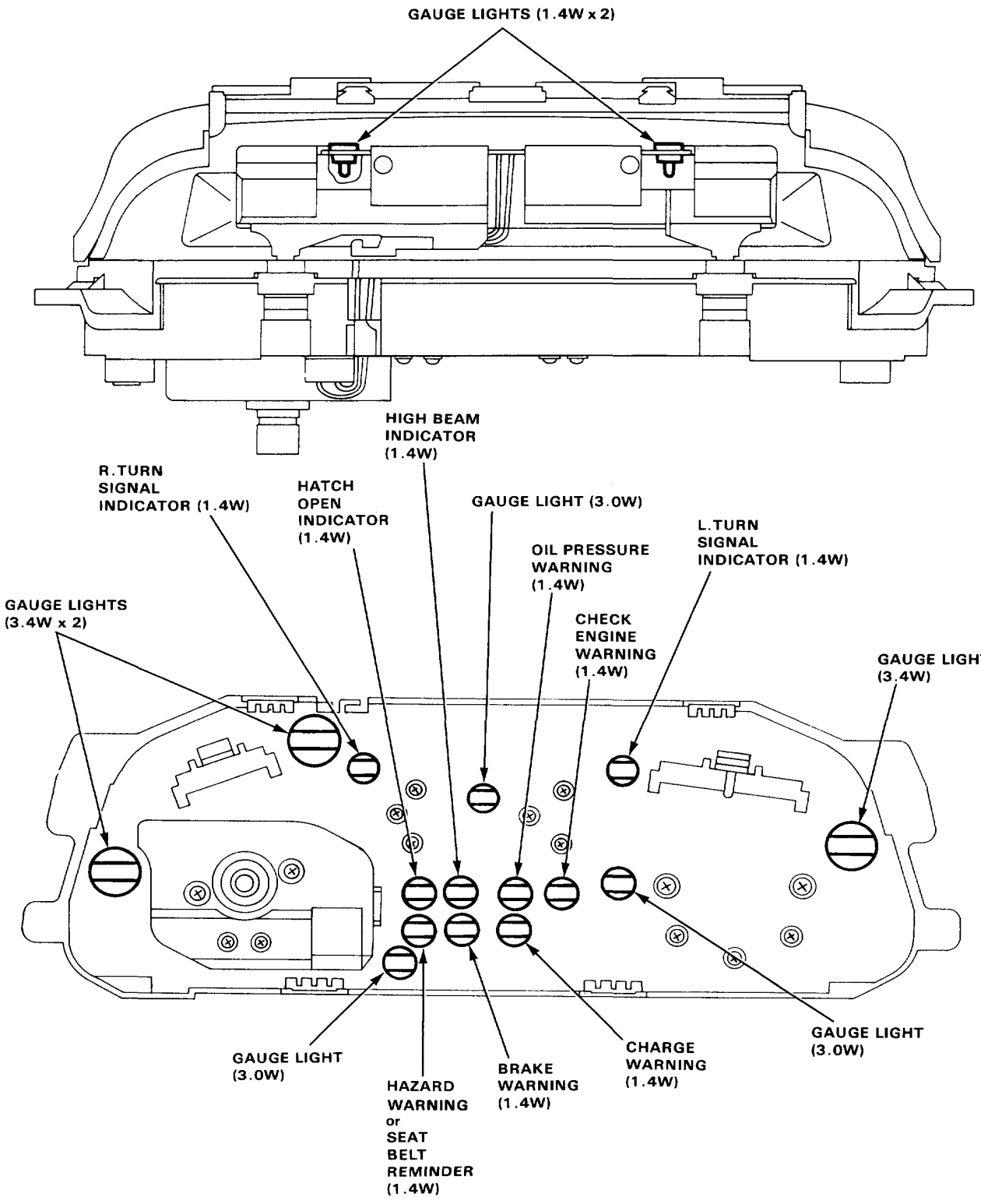


3. Remove the 4 screws, then remove the gauge assembly half-way and disconnect the speedometer cable and connectors.

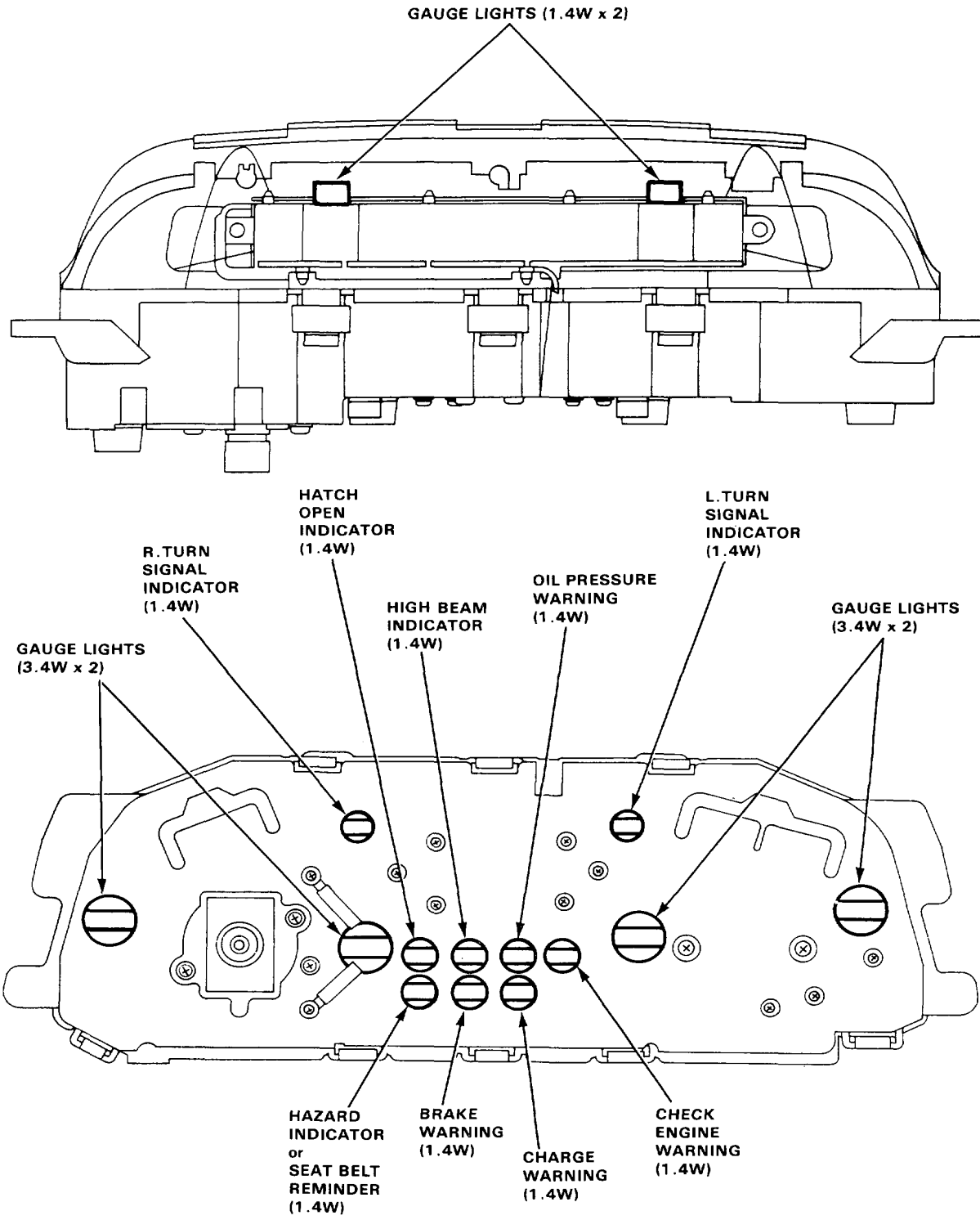


Gauge Assembly

Bulb Locations (Nippon Seiki type)



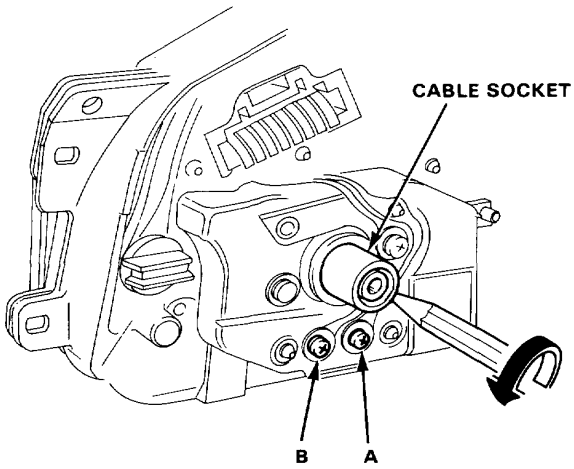
(Nippon Denso type)



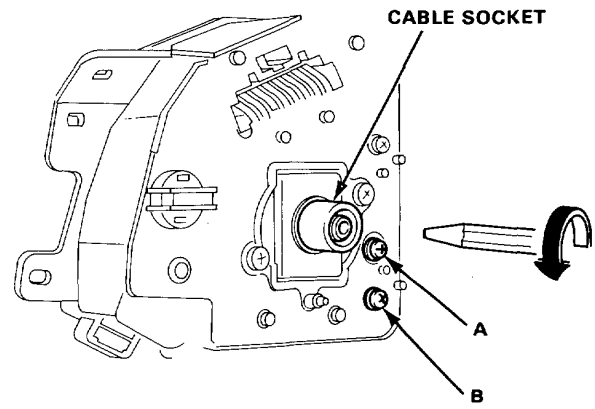
Speed Pulser Test

1. Remove the gauge assembly from the dashboard, then turn it over.
2. Break the lead off a pencil tip then insert the pencil into the speedometer cable connector socket and turn it. Connect an ohmmeter between the A and B terminals. There should be continuity 4 times between the A and B terminals per revolution.

Nippon Seiki type:



Nippon Denso type:



Disassembly

NOTE:
- Handle the terminals and printed circuits carefully to avoid damaging them.
- Gauge assembly manufactured by Nippon Seiki is shown below.